REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

Claims 1-7, 13-14 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,986 to Labranque in view of Japanese Patent Publication No. 61-76887 to Fujitani. For the following reasons claim 1 and its dependent claims are now patentable over the cited references.

Claim 1 has been amended to replace the term "working medium" with --water-- and "sorption medium" with --zeolite--. Further, claim 1 has been amended to require that "a working pressure in the sorption unit is maintained below atmospheric pressure." The dependent claims have been amended to be consistent with amended claim 1. Claims 2-4 have been cancelled herein.

Regarding amended claim 1, neither Labranque not Fujitani teaches or suggests the use of water and zeolite in a sorption unit. Labranque discloses a reactor in which a refrigerating liquid, such as ammonia, is absorbed by a reagent, such as a salt. In the present invention, as set forth in claim 1, water is adsorbed onto zeolite. Applicant respectfully submits that one of ordinary skill in the relevant art would not find a suggestion or motivation to modify Labranque to use the water and

zeolite of claim 1. Moreover, Labranque teaches absorption whereas in a sorption unit according to claim 1, water would be adsorbed on the surface of the zeolite. Because of this difference in function, such a modification is not merely a substitution of equivalent elements.

Further, regarding claim 1, neither Labranque nor Fujitani teaches or suggests a working pressure in the sorption unit is maintained below atmospheric pressure. Moreover, Fujitani discloses a high pressure vessel, hydrogen as a working medium and metal as a sorption medium. Only under high pressure a hydride is formed and stored in the lattice between metal atoms. Thus, the teachings of Fujitani are dependent upon a high pressure environment. There is no suggestion or motivation in the prior art to modify Fujitani to operate at below atmospheric pressure.

For all of the above reasons, claim 1 and dependent claims 5-7, 13, 14 and 16 are patentable over the prior art of record. Further, new independent claim 45 is patentable over the prior art of record.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 30882US1.

Respectfully submitted,

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Date: March 18, 2003

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IN THE CLAIMS:

Claims 1, 5-10 and 19 have been amended in the following manner:

1. (thrice amended) A sorption unit for an air-conditioning and heat technology apparatus, said unit having ~~a working medium~~ water and ~~a sorption medium~~ zeolite, wherein the ~~working medium~~ water is exothermally sorbed in said ~~sorption medium~~ zeolite and in a subsequent endothermic reaction again is desorbed, said unit further having sheets for thermal conduction past which said ~~working medium~~ water is guided, said sheets being in contact with said ~~sorption medium~~ zeolite, wherein said ~~sorption medium~~ zeolite forms string-shaped profiled bodies (4) which are designed to create surface contact with said sheets (3, 3'), ~~and~~ wherein channels (6) for passage of ~~working medium~~ water are formed by means of said string-shaped profiled bodies (4), wherein a working pressure in the sorption unit is maintained below atmospheric pressure.

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5. (twice amended) The sorption unit as defined in claim 1, wherein said channels for passage of the ~~working medium~~ water are formed in said profiled bodies and extend in a longitudinal direction of said profiled bodies.

6. (twice amended) The sorption unit as defined in

claim 5, wherein said channels for passage of the ~~working medium~~ water are axially symmetrical relative to the longitudinal direction of the profiled bodies.

7. (amended) The sorption unit as defined in claim 6, wherein said channels for passage of the ~~working medium~~ water have a circular diameter.

8. (amended) The sorption unit as defined in claim 6, wherein said channels for passage of the ~~working medium~~ water have a square diameter.

9. (amended) The sorption unit as defined in claim 6, wherein said channels for passage of the ~~working medium~~ water have a square diameter with rounded corners.

10. (twice amended) The sorption unit as defined in claim 5, wherein each profiled body defines one channel for passage of the ~~working medium~~ water, said one channel being arranged in a center of the cross-section of the body.

19. (twice amended) The sorption unit as defined in claim 16, wherein the ends of said string-shaped profiled bodies (4) define openings through which ~~working medium~~ water can flow between adjacent ends of said profiled bodies (4).